Useful Internet Sites for GIS and Water Resources

Data for the United States

The National Map
A central source for US Government data. http://nationalmap.gov/. This includes elevation, hydrography, land cover, orthoimagery, watershed boundaries and topographic maps of use for GIS in Water Resources, among much other content.

Watershed Boundaries (Hydrologic Units)
Description http://water.usgs.gov/GIS/huc.html. The 8-digit hydrologic cataloging units are the basic water resources subdivision of the United States
Information on Watershed Boundary Dataset (2 to 12 digit HUCs for the US) https://www.usgs.gov/core-science-systems/ngp/national-hydrography/watershed-boundary-dataset

Hydrography
National Hydrography Dataset (NHD). https://www.usgs.gov/core-science-systems/ngp/national-hydrography/national-hydrography-dataset
NHDPlus http://www.horizon-systems.com/nhdplus/ A 100K resolution dataset that integrates the National Hydrography, Elevation, and Land Cover Datasets.
High Resolution NHDPlus https://www.usgs.gov/core-science-systems/ngp/national-hydrography/nhdplus-high-resolution A 24K resolution dataset that integrates the National Hydrography, Elevation, and Land Cover Datasets.

Elevation Data
National elevation dataset http://nationalmap.gov/elevation.html
Open Topography high resolution LIDAR data http://www.opentopography.org/
USGS Earth Explorer http://earthexplorer.usgs.gov/ A variety of USGS data holdings including ASTER Global DEM, GTOPO30, Coastal National Elevation Database

Global Coastline from National Geophysical Data Center
http://www.ngdc.noaa.gov/mgg/shorelines/gshhs.html

USDA NRCS Soils Data
Soils Portal http://www.nrcs.usda.gov/wps/portal/nrcs/site/soils/home/
Web Soil Survey http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
There are two primary soil data sources in the US
- SSURGO State and County Data. Specify an area of interest then access data for area of interest in Web Soil Survey
- STATSGO2 (US General Soil Map at 1:250,000 scale). Download by State in Web Soil Survey

STATSGO2 is available for the whole United States. SSURGO is much more detailed but is not available everywhere.
USDA Data Gateway http://datagateway.nrcs.usda.gov/
Polaris Soils Data
Paper: https://www.sciencedirect.com/science/article/pii/S0016706116301434
Data: http://stream.princeton.edu/POLARIS

Land Use/Land Cover Data

National Land Cover Dataset. https://viewer.nationalmap.gov/basic/ and Multi-Resolution Land Characteristics Consortium (MRLC). http://www.mrlc.gov/

National Land Cover Institute http://landcover.usgs.gov/

Land Cover Change 2001 to 2006 to 2011 http://www.mrlc.gov/nlcdrlc.php

National Wetlands Inventory Center http://www.fws.gov/wetlands/

Water Resources Maps and GIS Information http://water.usgs.gov/maps.html. This site is a listing data sources with map data from the USGS or organizations connected with the USGS.

Climate and weather

Climate.gov maps: http://www.climate.gov/maps-data

National Centers for Environmental Information https://www.ncei.noaa.gov/

USDA Agricultural Applied Climate Information System http://www.wcc.nrcs.usda.gov/climate/index.html

PRISM Climate Group Oregon State University http://prism.oregonstate.edu/

DayMET http://daymet.ornl.gov/ Gridded daily precipitation and temperature on a 1 km grid.

Nexrad radar data (including precipitation) https://gis.ncdc.noaa.gov/maps/ncei/radar

NRCS National Water and Climate Center http://www.wcc.nrcs.usda.gov/ that includes water supply forecasts, snow, precipitation and temperature.

SNOTEL http://www.wcc.nrcs.usda.gov/snotel/ real time snow data

US Drought Portal http://www.drought.gov/

Water Resources

USGS National Water Information System http://water.usgs.gov/usa/nwis/

Real Time USGS Data on Water Watch http://water.usgs.gov/nwis/rt

CUAHSI Data Services https://www.cuahsi.org/data-models and HydroClient at http://data.cuahsi.org/

National Weather Service Advanced Hydrologic Prediction Service http://water.weather.gov/ahps

National Water Model http://water.noaa.gov/about/nwm. http://water.noaa.gov/map

Environment

EnviroAtlas: http://enviroatlas.epa.gov/enviroatlas/

Satellite

Free Landsat Scenes http://glovis.usgs.gov.

USGS Earth Explorer http://earthexplorer.usgs.gov/

NASA EarthData https://earthdata.nasa.gov

NASA Worldview (includes MODIS) https://worldview.earthdata.nasa.gov/

NASA Land Processes DAAC https://lpdaac.usgs.gov/

Global Data

Natural Earth Data http://www.naturalearthdata.com/
HydroSheds – hydrologic derivative datasets from SRTM http://hydrosheds.cr.usgs.gov/
GTOPO30 - 30 arc-second cell (1:1,000,000 scale) global DEM
https://lta.cr.usgs.gov/GTOPO30
Hydro1K – hydrologic derivative datasets from GTOPO30
  https://lta.cr.usgs.gov/HYDRO1K
Global Water and Energy Experiment (GEWEX) http://www.gewex.org/
Global Runoff Data Centre http://www.bafg.de/GRDC/

Texas Data

Texas Natural Resource Information System http://www.tnris.org/
Texas Water Development Board GIS Data
http://www.twdb.texas.gov/mapping/gisdata.asp
Hurricane Harvey Collection on HydroShare
  https://www.hydroshare.org/resource/2836494ee75e43a9bfb647b37260e461/
Hurricane Harvey Story Map http://arcg.is/001jje

Utah and Mountainous West Data

Utah GIS Portal http://gis.utah.gov/ contains USGS Maps, DEM's, Orthophoto quads
  within Utah. Also includes if you look hard enough, liquefaction potential,
  Hydrography and Environmental data for certain locations. Also – 2 m resolution
  bare earth LIDAR data for Wasatch front.
Utah Geological Survey http://geology.utah.gov/maps/gis/index.htm
Western Regional Climate Center http://www.wrcc.dri.edu/
Bear River Watershed Information System. http://www.bearriverinfo.org/
Utah Climate Center.   http://climate.usurf.usu.edu/
Colorado Basin River Forecast Center. http://www.cbrfc.noaa.gov
Airborne snow observatory that measures snow from LIDAR https://nsidc.org/data/aso.
SNODAS gridded mapping of snow across the US
  https://www.nohrsc.noaa.gov/archived_data/

ESRI

Living Atlas https://livingatlas.arcgis.com/
ArcGIS.com http://www.arcgis.com